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AUTHOR Silber, Sharon
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ABSTRACT

This paper examined the processes of problem-solving in a group of child abusing families and in a demographically matched comparison group of nonabusing families. Problem-solving was elicited through an interactional task that required family members to spend 10 minutes deciding upon an area of common disagreement in the family. Responses to the task were then characterized in terms of the extent to which active engagement in the problem-solving reguired by the task was or was not exhibited. It was found that family members in abusing families devoted fewer conversational turns to problem-solving; they exhibited fewer sustained sequences of problem-solving; and children in abusing families were less likely to initiate problem-solving behavior. It was also found that the extent of engagement in the interactional task was predictive of the family's level of participation in treatment; families who were more involved in the task tended to sustain their involvement in treatment longer than those less involved. These findings suggest that abusing and nonabusing families exhibit differential patterns of interaction in response to a problem-solving task and that measurement of problem-solving communiction has relevance to the process of clinical intervention. (Author/RH)

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Patterns of Problem-Solving in Child Abusing and Nonabusing Families

Sharon Silber

Department of Psychology

Tulane University

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ABSTRACT

The present study examined processes of problem-solving in a group of child abusing families and in a demographically matched comparison group of nonabusing families. Problem-solving was elicited through an interactional task that required family members to spend ten minutes deciding upon an area of common disagreement in the family. Responses to the task were then characterized in terms of the extent to which active engagement in the problem-solving required by the task was or was not exhibited. It was found that family members in abusing families devoted fewer turns to problem-solving; they exhibited fewer sustained sequences of problem-solving; and children in abusing families were less likely to initiate problem-solving behavior. It was also found that the extent of engagement in the interactional task was predictive of the family's level of participation in treatment; families who were more involved in the task tended to sustain their involvement in treatment longer. These findings suggest that abusing and nonabusing families exhibit differential patterns of interaction in response to a problem solving task and that measurement of problem-solving communication has relevance to the process of clinical intervention.

Patterns of Problem-Solving in Child Abusing and Nonabusing Families

To understand the social interactional context within which child abuse occurs, investigators must describe the features of interaction that distinguish abusing and nonabusing families. To date, only a few studies have examined the nature of family interaction in child abusing families. These studies have found that abusing families are characterized by lower rates of interaction, higher rates of negative interaction and lower rates of positive interaction than nonabusing families (Burgess & Conger, 1978; Reid, Taplin & Loeber, 1980).

The present study extends previous work by examining processes of problem-solving in physically child abusing and nonabusing families. In examining these processes, the study is concerned with the following questions: Do abusing families exhibit lower levels of problem-solving than nonabusing families? Do abusing families exhibit particular difficulty in sustaining problem-solving? To what extent are various family members able to initiate problem-solving in abusing and nonabusing families? Do children in abusing families have a more restricted role with regard to problem-solving than do children in nonabusing families?

The study is also concerned with the relationship between problem-solving exhibited by the family and the family's ability to engage in treatment. Because of the difficulty in sustaining treatment in abusing families, it is important to determine whether interactional variables may be used to index the families'

motivation to sustain treatment. Previous work has shown that families who remain in treatment are more likely to exhibit improved functioning than families who drop out (Bermann, 1983). Therefore the present study is concerned with the question: Can a family's ability to enter into problem-solving predict their ability to sustain their participation in treatment?

METHOD

Subjects

The subjects for the present study were fourteen two-parent child abusing families who had been referred to child protective services for physical injuries of varying severity, and eight two-parent nonabusing families. In all the abusing families, at least one family member exhibited some abuse of alcohol or drugs. Often the abusing families exhibited other forms of violence beyond the child abuse (spouse abuse, neighborhood brawls, etc.).

In order to eliminate the potential influence of extraneous factors on the patterns of interaction described, a matched pairs design was utilized. Nonabusing families were matched on a family by family basis to eight families of the abusing sample with regard to race, SES, number and ages of children in the family (within two years) and parental employment. Table 1 compares the matched pairs of abusing and nonabusing families. As can be seen in Table 1, there are no significant differences between the abusing and nonabusing families on any of the features described.

Table 1

Comparison of Abusing and Nonabusing Families

	Abusing Families	Nonabusing Families
Number of families	8	8
Intact	Yes	Yes
Race	Caucasian	Caucasian
SES	34	38
Number of children	2.9	2.9
Age range of children	2-17	3-16
Average age of children	10.3	10.6
Father unemployed	5/8	5/8

Setting

The interactional data for the present study were collected in a University-affiliated clinical setting. For the abusing families, this information was collected prior to therapeutic intervention. None of the nonabusing families were under psychiatric treatment. For all families, the participation in the study represented their first contact with the setting. In the room where videotaping was conducted chairs were arranged in a semi-circle in front of a one-way mirror. Family members were greeted by the experimenter, seated themselves in the chairs, signed a consent form and then were introduced to the task.

Task Procedures

To elicit problem-solving discussion, an interactional task (developed by Bermann, 1983) required all family members to spend ten minutes deciding upon an area of shared disagreement. (See Appendix A for a description of the instructions to the families.) During the ten minute segment, the family was videotaped. All verbal and nonverbal behaviors were transcribed and coded.

Code

In considering the response of family members to the task, behaviors were coded into one of several categories. Coding categories indicated the degree of participation in the problem-solving task represented by the behavior.

On-task behaviors indicated instances of active participation in the task of deciding upon an area of disagreement, as in the remark "Why don't we talk about chores?"

Off-task behaviors were comprised of remarks or actions that were unrelated to the task of deciding upon an area of disagreement, as in the remark "I took your shoes in to be resoled yesterday."

Disagreement behaviors involved extension of the task beyond the purpose of deciding upon an area of disagreement to discussing a particular family issue or disagreement, as in the remark "Why didn't you take the garbage out last night?"

Reliabilities

The code was found to be highly reliable. Independent coding of 200 behaviors by two independent coders achieved .96 reliability

overall. (Reliability was computed by dividing the number of agreements achieved by the two coders into the total number of events coded, including both agreements and disagreements.) Reliabilities of individual task categories were .96 for on-task, .86 for disagreement and 1.0 for off-task.

Coding was performed using both the videotape and the transcript of interaction. Because it was found that the second five minutes of task performance contained relatively few turns and that those trends in the data that characterized the first five minutes of interaction also characterized the second five minutes, only data from the first five minutes of task interaction will be reported.

RESULTS

Extent of Problem-Solving

To examine whether abusing families exhibit lower levels of problem-solving than nonabusing families, the extent to which families participated in the problem-solving task was examined. Table 2 presents the distribution of turns by task categories for abusing and nonabusing families.

Table 2

Distribution of Turns by Task Categories

	On-task	Disagreement	Off-task	TOTAL
Abusing	335 (.39)	143 (.17)	376 (.44)	854
Nonabusing	654 (.55)	169 (.14)	374 (.31)	1197

As Table 2 indicates, turns of abusing and nonabusing families are distributed differently, with abusing families devoting relatively fewer turns to on-task activity and relatively greater turns to off-task activity. Whereas abusing families devote 39% of all turns to problem-solving, nonabusing families devote 55% of all turns to problem-solving. To determine whether abusing families on the whole differ from nonabusing families in the frequency distribution of the measure under consideration, the G statistic (Bishop, Fienberg & Holland, 1975) is employed. G is similar to Pearson's X^2 in that both measure closeness of fit for contingency table data to a hypothetical model. However, the G test has applications in the present case because it allows partitioning of the contingency table into groups of abusing and nonabusing families, whereas the X^2 does not. Using this statistic, significant differences in the distribution of task-related turns between abusing and nonabusing were found; $G(2) = 47.2$, $p < .0001$.

To determine the consistency of this trend, demographically matched pairs of abusing and nonabusing families were compared. Table 3 presents this comparison.

Table 3

Paired Comparison of Turns Devoted to Problem-Solving

Pairs	1	2	3	4	5	6	7	8
Nonabuse > Abuse	X	X		X	X	X	X	X
Abuse > Nonabuse			X					

In 7 out of 8 demographically matched pairs of families, the nonabusing family devoted more turns to problem-solving than the abusing family, sign test, $p < .05$.

Thus it appears that, overall, abusing families devote fewer turns to problem-solving than nonabusing families and that this trend is generally consistent across the families studied.

Sustained Sequences of Problem-Solving

To examine the ability of family members to sustain problem-solving sequences, extended sequences of turns in a single category of task participation were identified. This was done by identifying all sequences in which two family members alternated at least four turns in a particular category. The number of these four turn sequences within each category was then counted. Table 4 presents these data.

Table 4

Number of Sustained Turntaking Sequences

	On-task	Disagreement	Off-task
Abusing	23	23	23
Nonabusing	103	30	13

Nonabusing families exhibited almost five times as many sustained turntaking sequences in the on-task category as abusing families, $G(2) = 30.46$, $p < .001$. This finding of more sustained on-task sequences in nonabusing families was supported by paired comparison of abusing and nonabusing families, as shown in Table 5.

Table 5

Paired Comparison of Sustained On-Task Sequences

Pairs	1	2	3	4	5	6	7	8
Nonabuse > Abuse	X	X		X	X	X	X	X
Abuse > Nonabuse								
Nonabuse = Abuse			X					

As indicated by Table 5, the nonabusing family of the matched pair exhibited sustained on-task sequences to an equal or greater extent than the abusing family in all matched pairs.

It was therefore concluded that abusing families sustain problem-solving sequences to a lesser extent than nonabusing families.

Initiation of Problem-Solving

To determine whether abusing and nonabusing families differ in the extent to which parents and children initiate task categories, the distribution of initiations was examined. Initiations of task categories were defined as those turns that began participation in a new task category (either on-task, off-task or disagreement), after at least 2 turns in another category. Initiations were examined to determine if children in abusing families have a more restricted role in initiating task categories than children in nonabusing families.

Table 6

Initiations

	By parent	By child
Abusing	60%	40%
Nonabusing	42%	58%

As Table 6 indicates, the majority of initiations into a new category were by parents in the abusing families. In nonabusing families, the majority of initiations were by children, $G(2) = 5.84$, $p < .02$.

Considering only initiations of the on-task category, a particularly striking pattern of effects was noted: Whereas both parents and children initiate on-task turns in 7 out of 8 nonabusing families, in only 1 abusing family do both parents and children initiate on-task turns. (Sign test, $p < .05$)

From these analyses, it therefore appears that children initiate relatively more turns in nonabusing families, and, specifically, children in nonabusing families initiate relatively more on-task turns.

Prediction of Engagement in Treatment

In addition to examining the patterns of problem-solving in abusing and nonabusing families, the present study also explored the relationship between level of problem-solving and the families' willingness to engage in treatment. To examine whether families

who engaged in higher levels of problem-solving were more likely to engage in treatment, Pearson product moment correlations were computed between various task-related measures for the abusing families and the number of appointments attended by the family (These correlations were computed using data from the 14 child abusing families, not simply the 8 families that had been demographically matched to the nonabusing families). The correlations are presented in Table 7.

Table 7

Correlations between Interactional Measures and Number of Appointments Kept

Interactional measure	Correlation with number of appointments	
Number of turns taken	.41	n.s.
Proportion of verbal turns	-.26	n.s.
Proportion of on-task turns	.56	$p < .05$
Proportion of on-task turns (partialled on the total number of turns and the proportion of verbal turns)	.62	$p < .05$

A significant positive correlation was found between problem-solving during task interaction and the number of appointments kept

by the family. Families who exhibited higher levels of problem-solving upon initial contact stayed in treatment longer. This tendency appears to be unrelated to the family's level of activity or the verbal fluency of the family; when these factors are controlled for by use of partial correlation techniques the relationship between problem-solving and engagement in treatment is strengthened.

These analyses indicate that there is a positive correlation between the extent to which the family engages in problem-solving and the extent to which the family engages in treatment.

DISCUSSION

In the present study, it was found that abusing families differed from nonabusing families in the amount and structure of problem-solving that they displayed. Family members in abusing families devoted fewer of their turns to problem-solving, they were less able to sustain sequences of problem-solving and children in abusing families were less likely to exhibit initiation of problem-solving than children in nonabusing families. It was also found that, among abusing families, the level of family problem-solving discussion at initial contact predicted the family's ability to sustain their participation in treatment.

These findings suggest that the present methodology is useful in 1) evoking aspects of interaction that distinguish abusing and nonabusing families, 2) providing a means for describing those differences and 3) predicting which families are likely to engage in treatment on the basis of interactional characteristics.

Further work will be necessary to replicate these findings on a larger sample of families and to describe, in greater detail, the processes that contribute to the breakdown of problem-solving in child abusing families.

References

Bermann, E. (1983). The University of Michigan Child Abuse/Neglect, Substance Abuse Family Therapy Project. Final report to the National Center on Child Abuse and Neglect.

Bishop, Y., Fienberg, S., & Holland, P. (1975). Discrete multivariate analysis: Theory and practice. Cambridge, MA: MIT Press.

Burgess, R., & Conger, R. (1978). Family interaction in abusive, neglectful and normal families. Child Development, 49, 1163-1173.

Reid, J., Taplin, P., & Lorber, R. (1980). Social interaction approach to the treatment of abusive families. In Proceedings of the 1979 Banff Conference on Behavior Modification.

Appendix A

Task Instructions

Upon arrival for participation, families were greeted by the experimenter who introduced himself to all family members, explained the set-up of the room and the videotaping procedures and asked the parents and any children older than 16 to sign a consent form. The experimenter then described the task in the following way:

> All families have areas of disagreement. It is a normal part of family life. We are interested in how families talk about their disagreements. I am going to give you ten minutes to decide on a topic which all family members agree is an area of disagreement. After ten minutes, I will return and we can discuss this topic.